

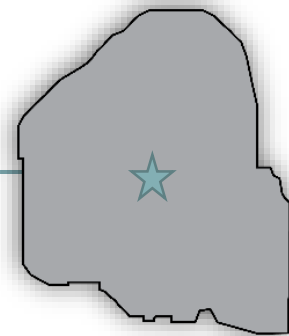


THE HANFORD SITE

Tank-Side Cesium Removal Demonstration Project Update

Steve Pfaff
U.S. Department of Energy

January 8, 2020

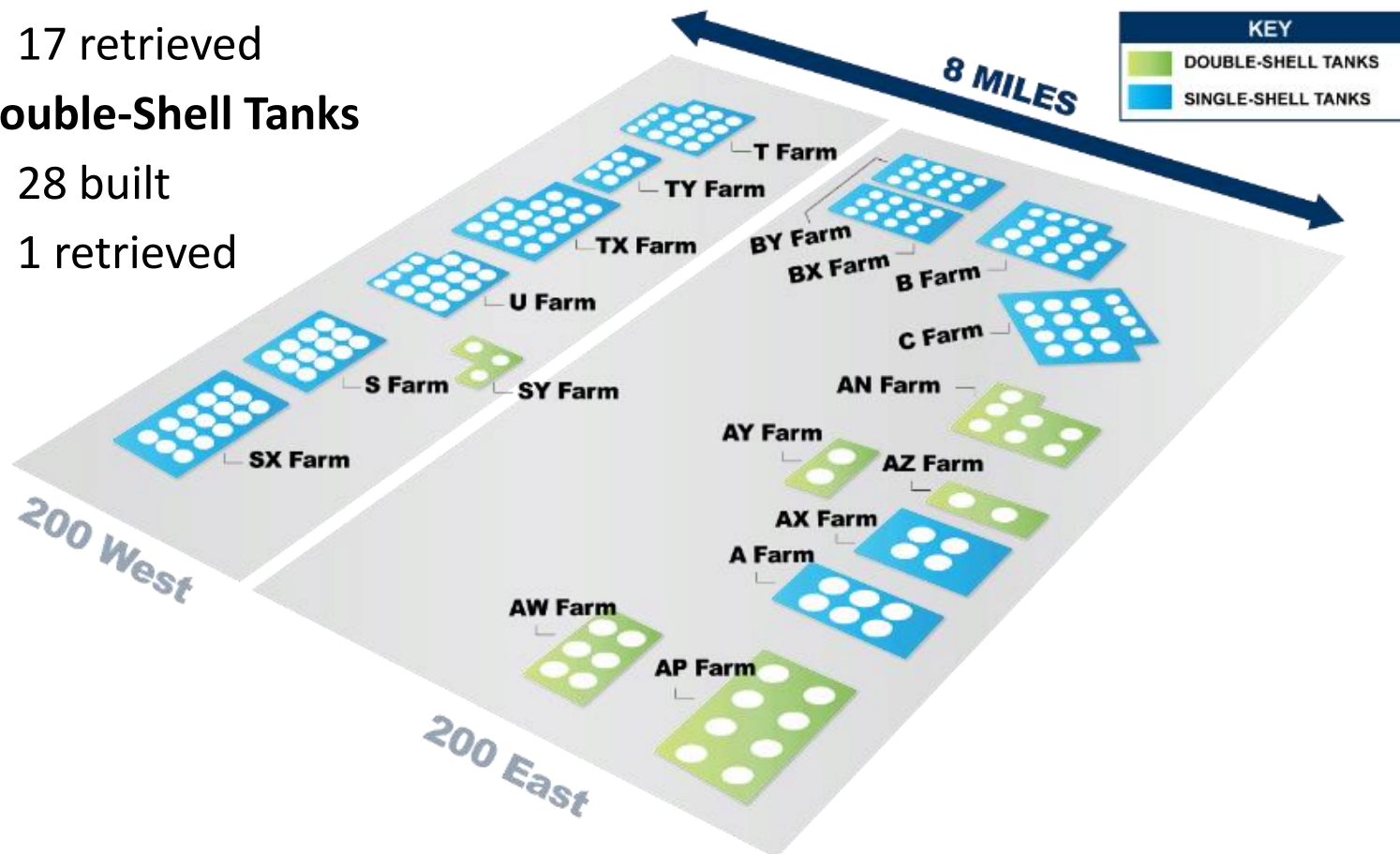


Single-Shell Tanks

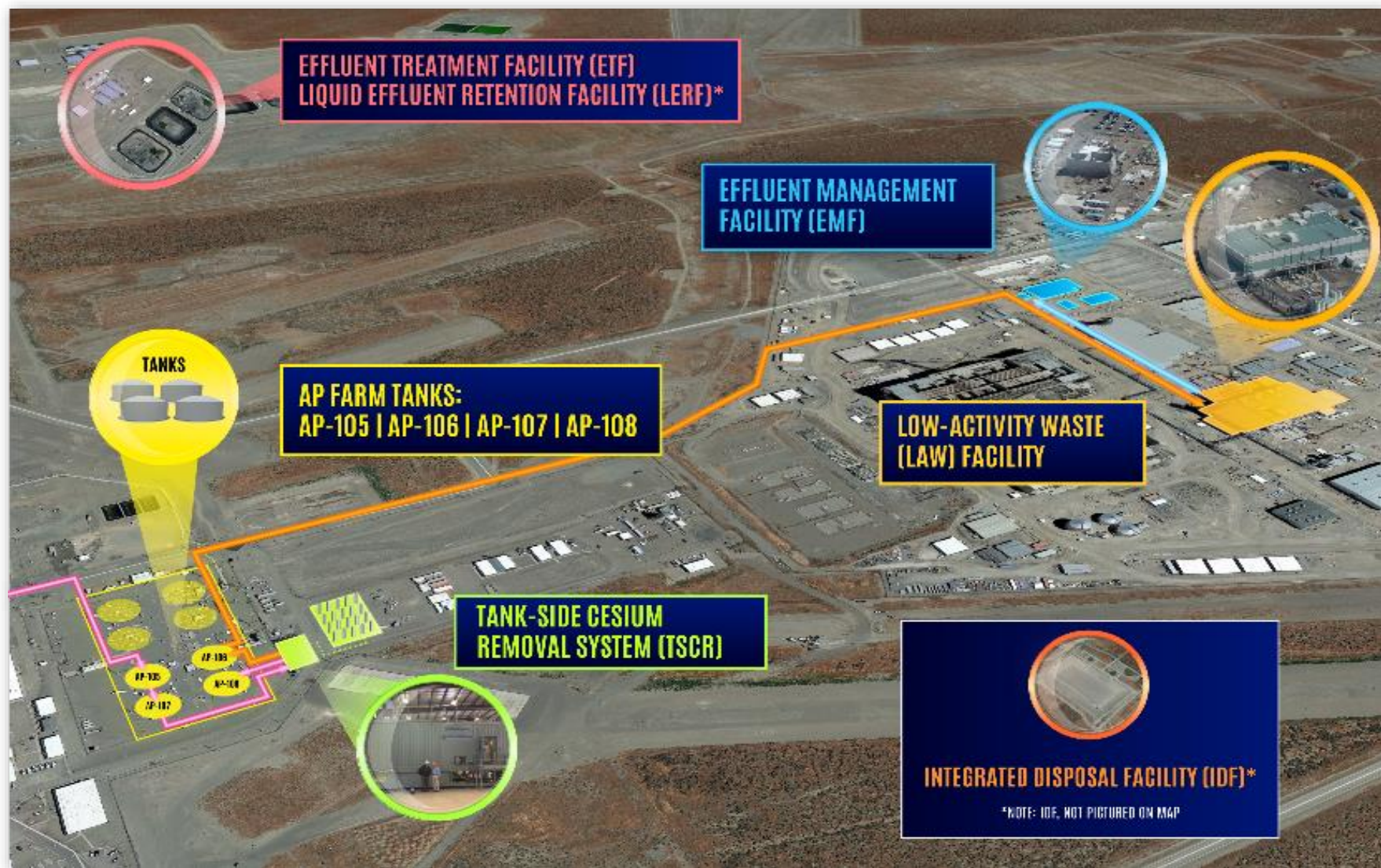
- 149 built
- 17 retrieved

Double-Shell Tanks

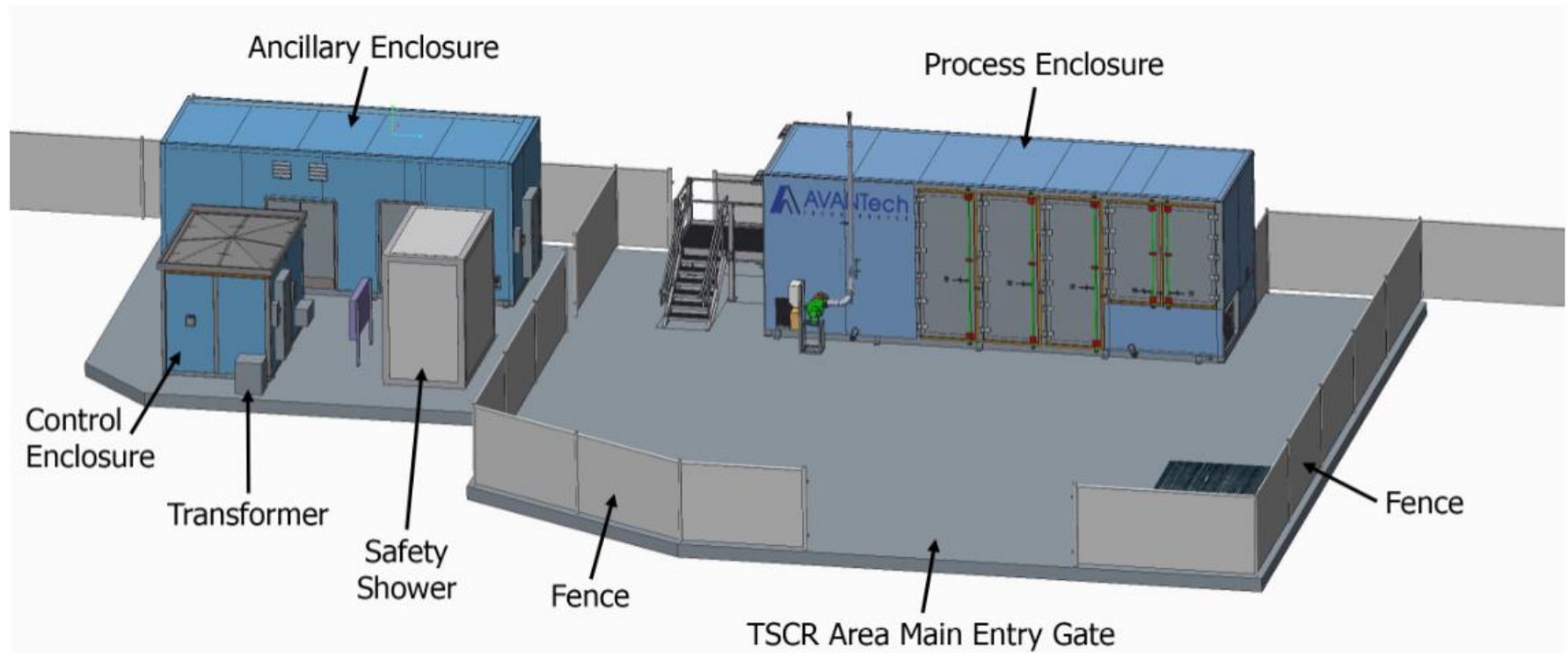
- 28 built
- 1 retrieved



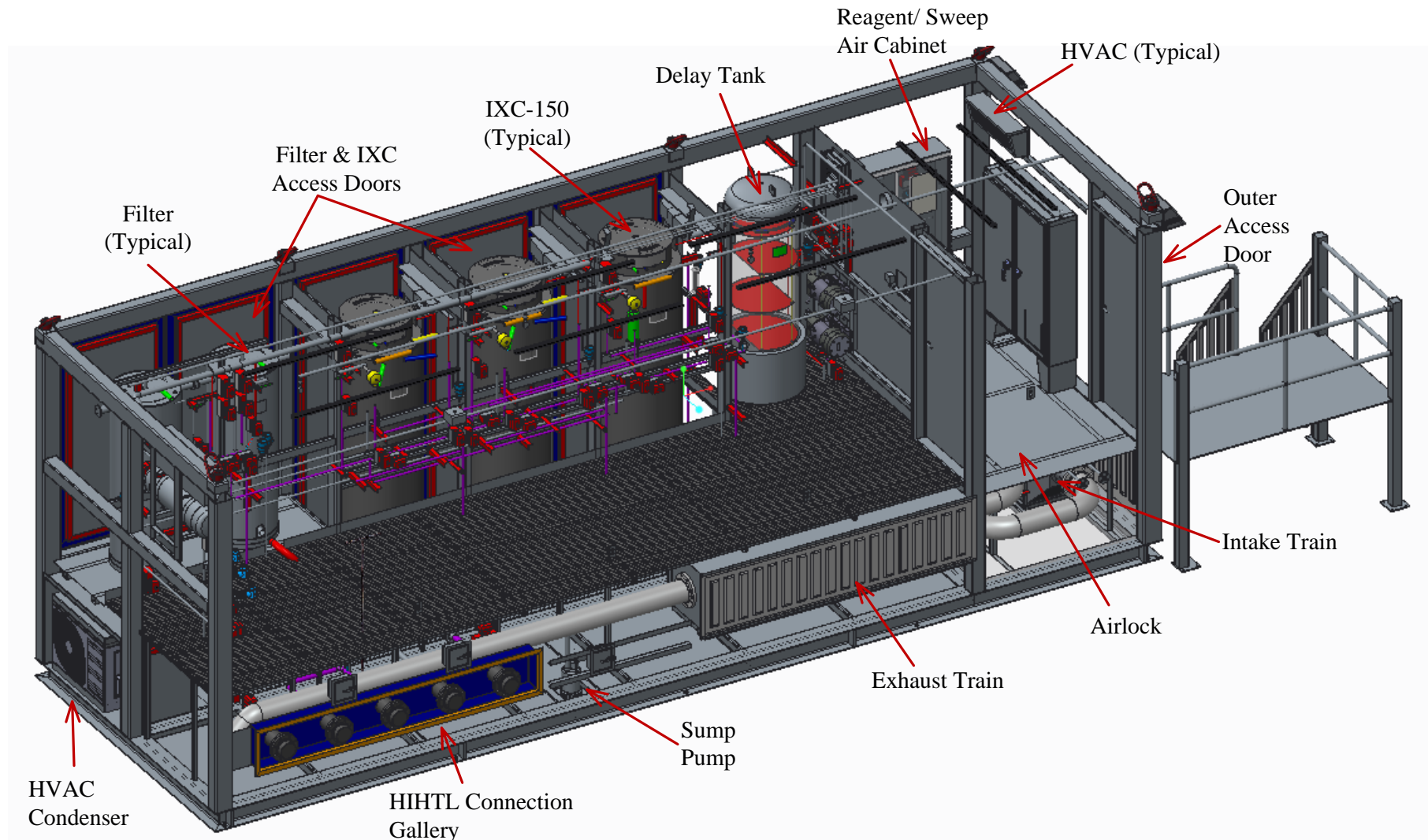
Treating Tank Waste



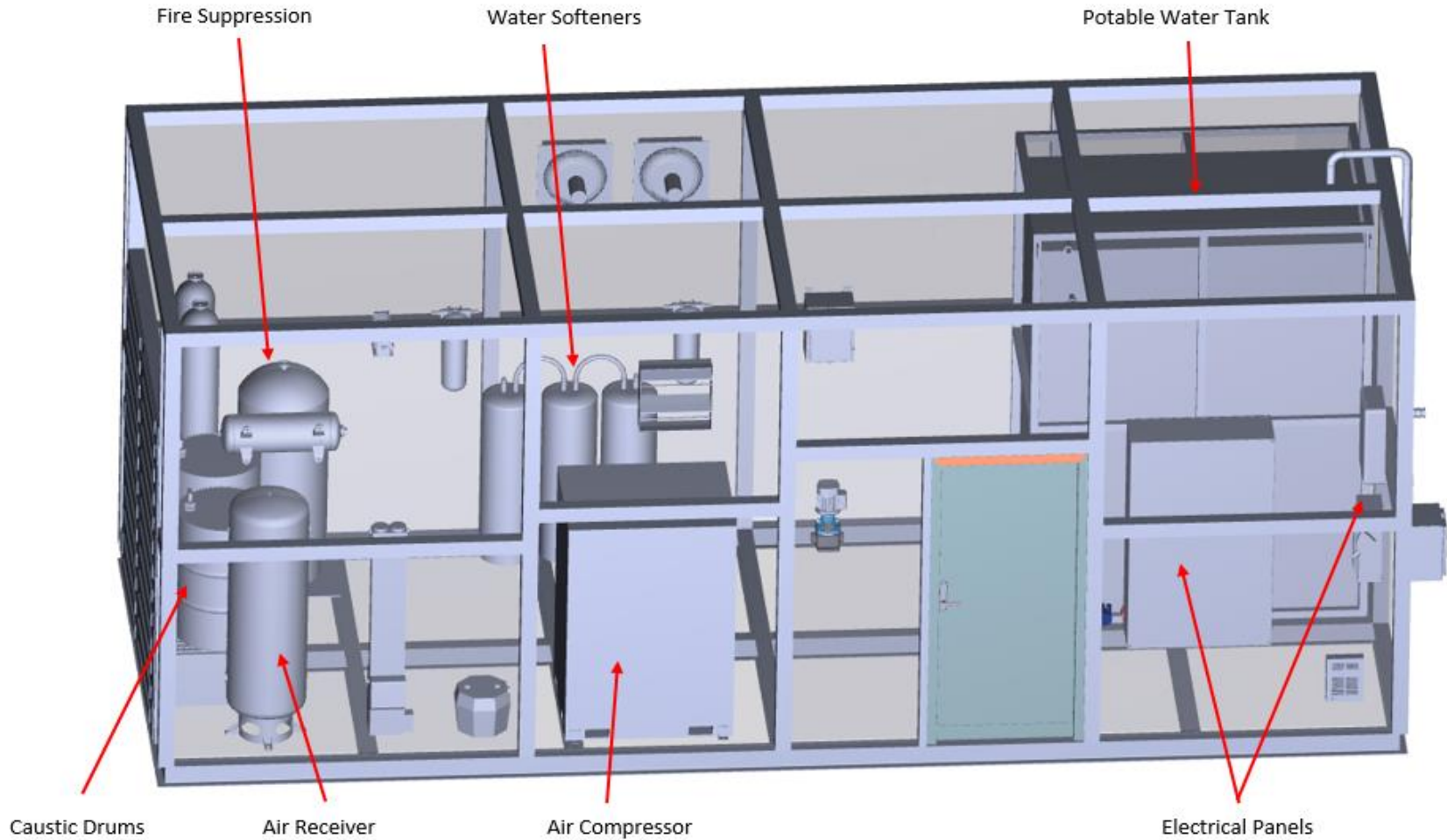
Tank-Side Cesium Removal Equipment



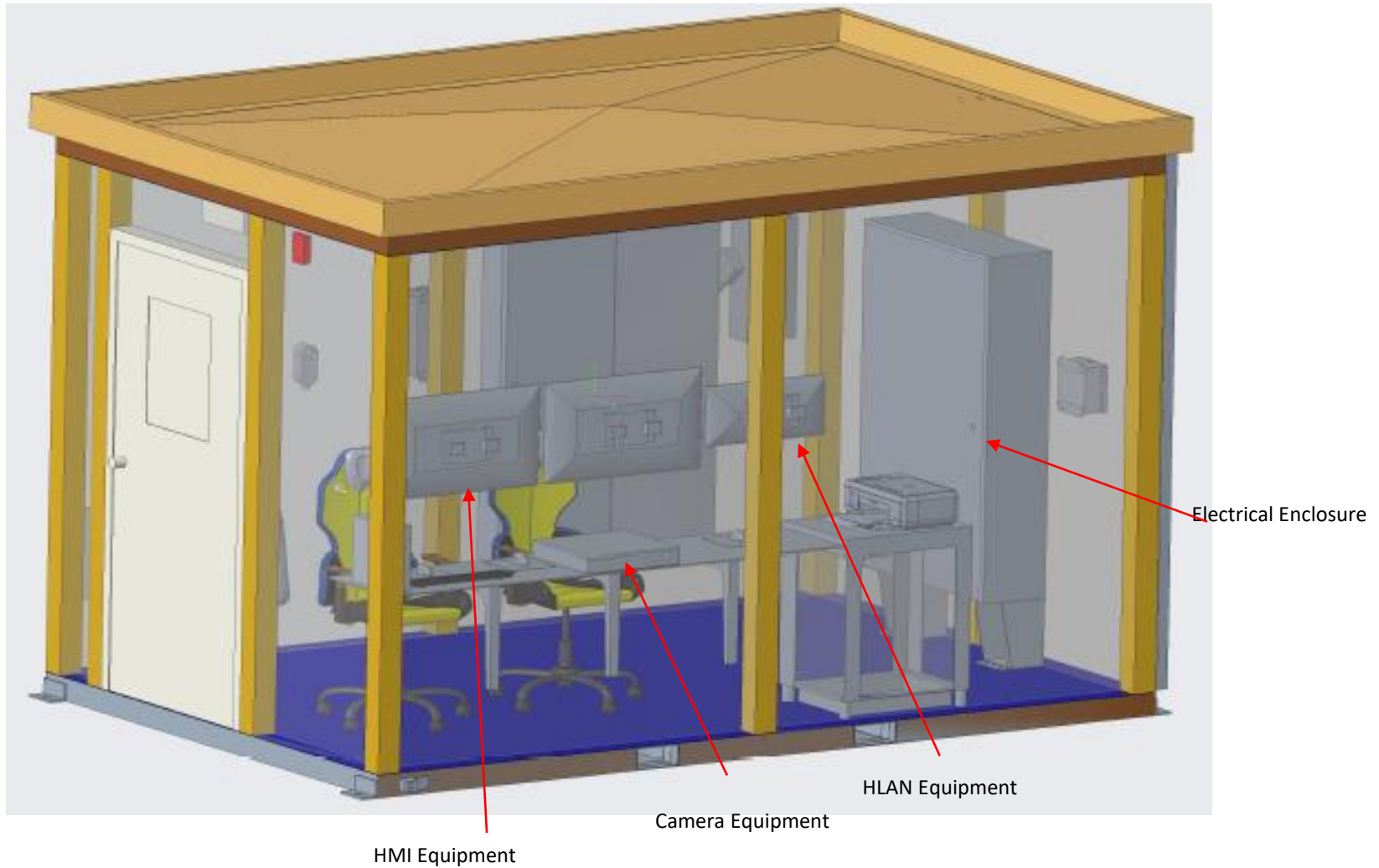
Tank-Side Cesium Removal Process Enclosure



Tank-Side Cesium Removal Ancillary Enclosure



Tank-Side Cesium Removal Control Enclosure



Unloading the Process Enclosure



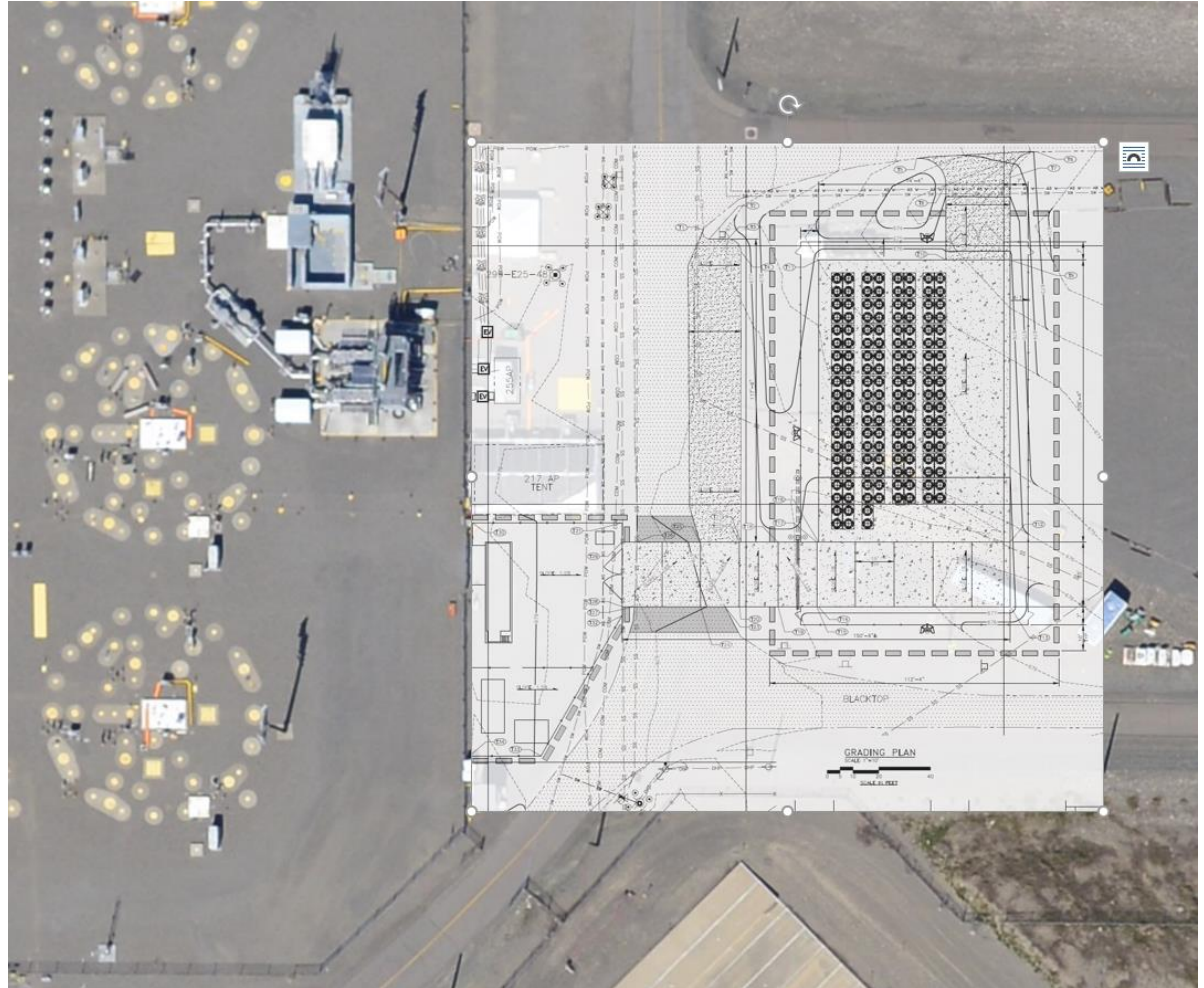
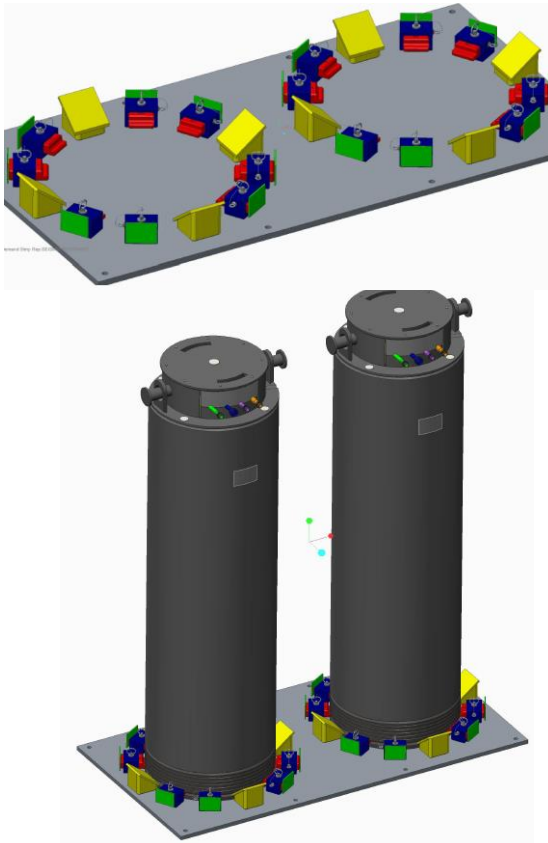
Placing the Ancillary Enclosure



Placing the Control Enclosure



Ion Exchange Column Storage Pad



Transporting Ion Exchange Columns

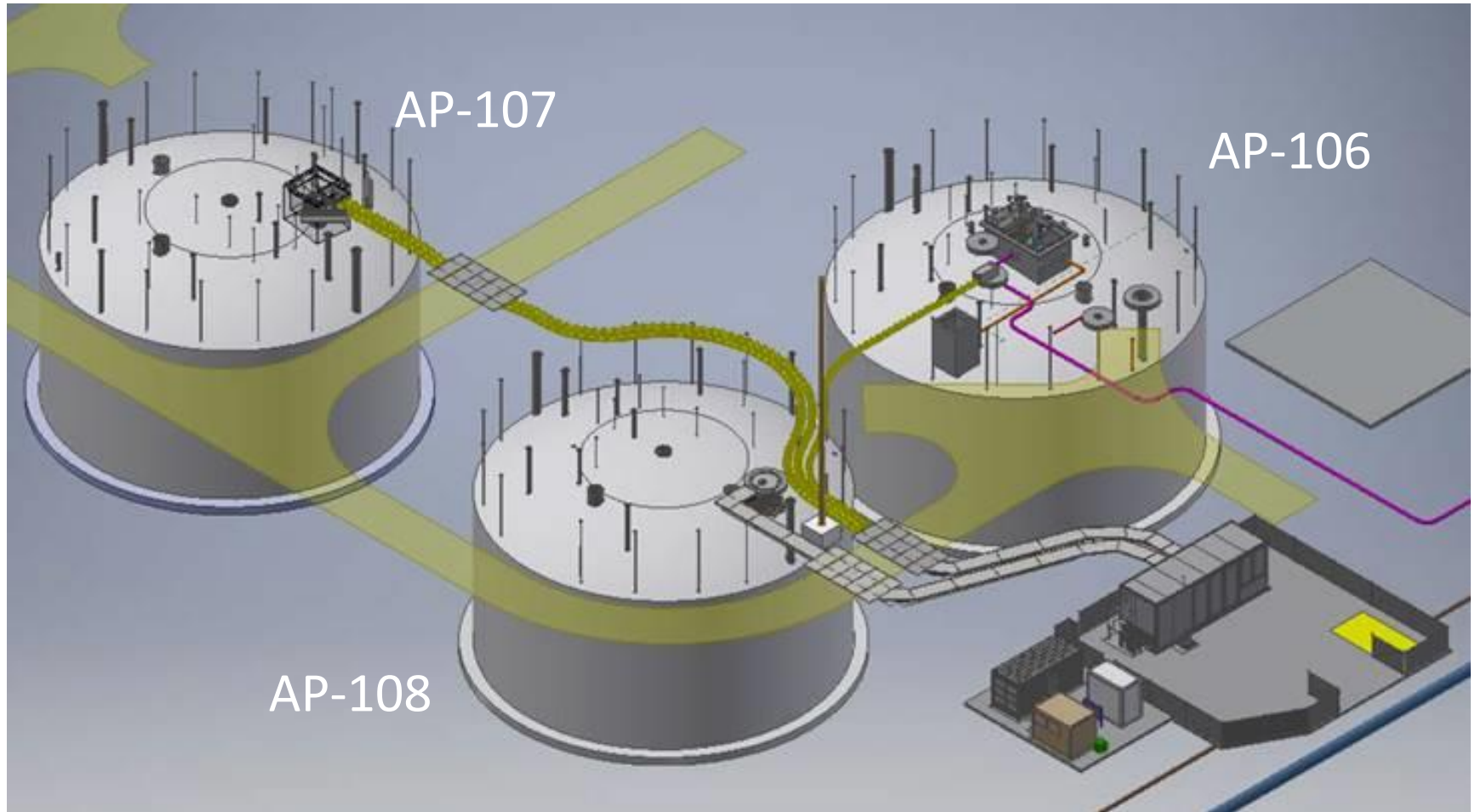


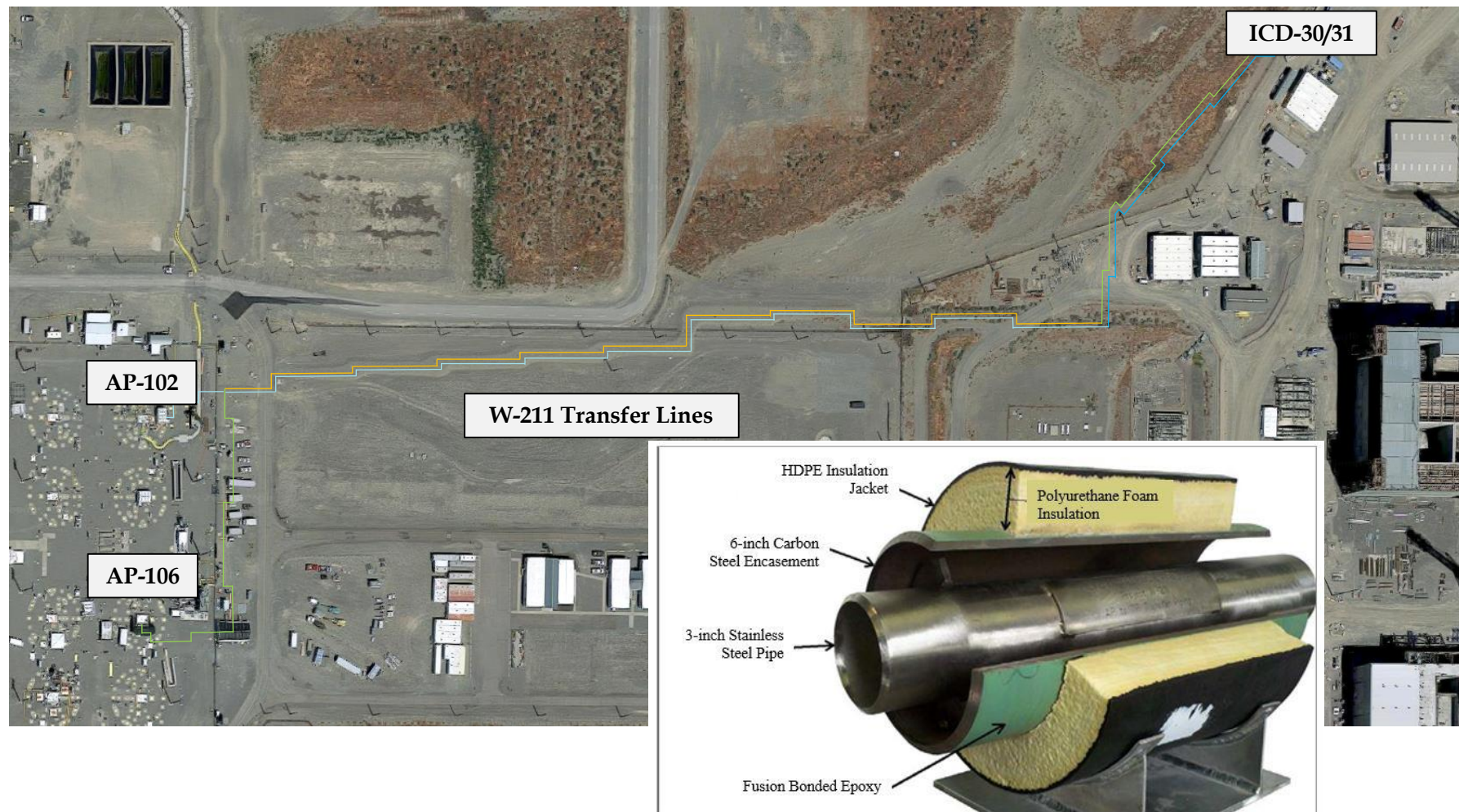
Kalmar DCG160-12T high-capacity forklift

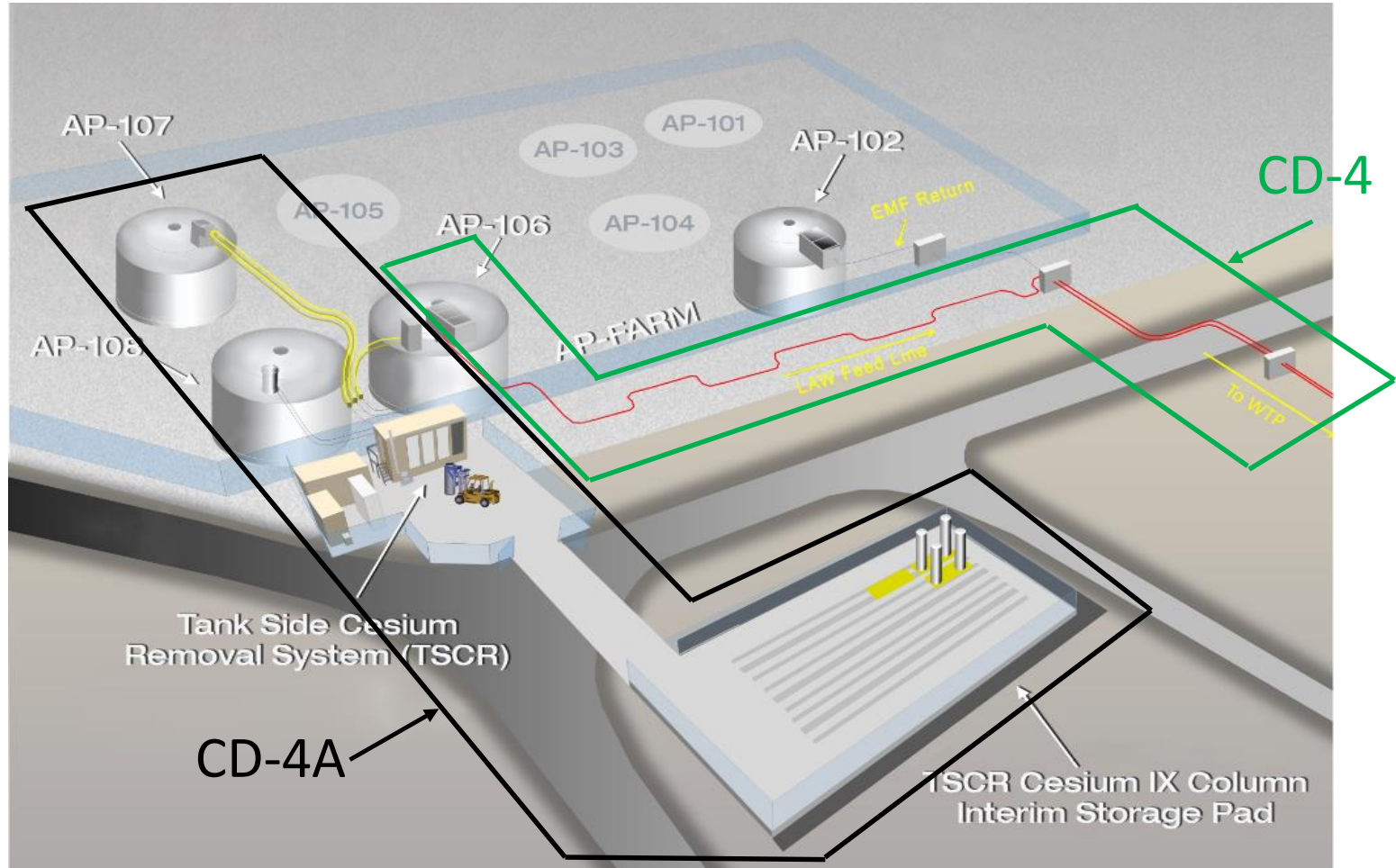


Ion exchange column lifting yoke load test

Double-Shell Tanks Directly Supporting Tank-Side Cesium Removal







Expect the following:

- Full construction authorization by March 2020
- TSCR equipment installed onsite by the end of fiscal year 2020
- TSCR operational to pretreat tank waste liquids by the end of fiscal year 2021



Questions?